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## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

## Listing of Claims:

1. (Currently amended) A glass for laser processing that is processed through laser beam irradiation,

wherein the glass for laser processing has a composition that satisfies the following relationships:

 $40 \le M[NFO] \le 70$ ;

 $5 \le (M[TiO_2]) \le 45$ ; and

 $5 \le M[NMO] \le 40$ ,

where M[NFO], M[TiO<sub>2</sub>], and M[NMO] denote the content by percentage of network forming oxides (mol%), that of TiO<sub>2</sub> (mol%), and that of network modifying oxides (mol%), respectively, and

the composition essentially is free from Y<sub>2</sub>O<sub>3</sub>.

2. (Original) The glass for laser processing according to claim 1, wherein the network forming oxides are at least one oxide selected from SiO<sub>2</sub> and B<sub>2</sub>O<sub>3</sub>, the network modifying oxides are at least one oxide selected from alkali metal oxides and alkaline earth metal oxides, and the composition further satisfies the following relationship:

$$5 \le (M[TiO_2] + M[Al_2O_3]) \le 45,$$

where M[Al<sub>2</sub>O<sub>3</sub>] denotes the content by percentage of Al<sub>2</sub>O<sub>3</sub> (mol%).

3. (Original) The glass for laser processing according to claim 2, wherein a value  $f_m$  defined by the following formula is 1.35 or lower:

$$f_m = \left(\frac{\sum x_i C_i Z_i}{(r_i + r_0)^2}\right) / \sum x_i C_i$$

where  $x_i$  denotes a molar fraction for which oxides (i) containing cations (i) other than alkali metal ions and alkaline earth metal ions account in the composition;  $C_i$  indicates the number of the cations (i) included in composition formulae of the oxides (i);  $Z_i$  denotes valences of the

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cations (i); and  $r_i$  and  $r_0$  indicate values expressing ion radii of the cations (i) and oxide ions by angstrom, respectively.

4. (Original) The glass for laser processing according to claim 2, wherein a value  $F_m$  defined by the following formula is 400 kJ·mol<sup>-1</sup> or lower:

$$F_m = \sum x_i C_i E_{di} / \sum x_j C_i N_j,$$

where  $x_j$  denotes a molar fraction for which oxides (j) other than alkali metal oxides and alkaline earth metal oxides account in the composition;  $C_j$  indicates the number of cations (j) included in composition formulae of the oxides (j);  $E_{dj}$  denotes dissociation energy of the oxides (j) expressed with a composition ratio of the cations (j) being 1; and  $N_j$  indicates the number of oxide ions coordinated to the cations (j) in the oxides (j).

- 5. (Original) The glass for laser processing according to claim 4, satisfying a relationship of  $(F_m/\alpha) \le 0.13$  when the value  $F_m$  and an absorption coefficient  $\alpha$  of the glass for laser processing are expressed by the same unit.
- 6. (Original) The glass for laser processing according to claim 2, wherein the glass for laser processing is composed essentially of SiO<sub>2</sub>, TiO<sub>2</sub>, and at least one oxide selected from the alkali metal oxides and alkaline earth metal oxides, and the number of Si-O-Ti bonds per SiO<sub>4</sub> unit is at least 0.4.
- 7. (Original) The glass for laser processing according to claim 2, wherein the glass for laser processing is composed essentially of SiO<sub>2</sub>, TiO<sub>2</sub>, and at least one oxide selected from the alkali metal oxides and alkaline earth metal oxides, and satisfies the following relationships:

$$N_{BO}^{I}/\alpha \le 11 \times 10^{-6}$$
 cm when  $M_{Si}N_{NBO}^{I} - 2M_{Ti} > 0$ ; and

$$N_{BO}/\alpha \le 11 \times 10^{-6}$$
 cm when  $M_{Si}N_{NBO}^{I} - 2M_{Ti} \le 0$ ,

where  $M_{Si}$  and  $M_{Ti}$  denote molar fractions of Si and Ti contained in the glass for laser processing, respectively;  $N_{BO}^{I}$  and  $N_{NBO}^{I}$  indicate the number of bridging oxygen atoms and the number of non-bridging oxygen atoms, respectively, in a glass structure that is free from Ti;  $\alpha$  denotes an absorption coefficient (unit: cm<sup>-1</sup>) of the glass for laser processing; and  $N_{BO}$  indicates the number

of oxygen atoms, per SiO<sub>4</sub> unit, that each still is cross-linking two Si atoms even after introduction of Ti.

8. (Currently amended) A glass for laser processing that is processed through laser beam irradiation,

wherein the glass for laser processing has a composition that satisfies the following conditions:

 $40 \le M[SiO_2] \le 60$ ;

 $10 \le M[Al_2O_3] \le 20;$ 

 $10 \le M[TiO_2] \le 20$ ; and

 $10 \le M[MgO] \le 35$ ,

where M[SiO<sub>2</sub>], M[Al<sub>2</sub>O<sub>3</sub>], M[TiO<sub>2</sub>], and M[MgO] denote the content by percentage of SiO<sub>2</sub> (mol%), that of Al<sub>2</sub>O<sub>3</sub> (mol%), that of TiO<sub>2</sub> (mol%), and that of MgO (mol%), respectively, and the composition essentially is free from Y<sub>2</sub>O<sub>3</sub>.

- 9. (New) The glass for laser processing according to claim 1, wherein the glass consists essentially of TiO<sub>2</sub>, at least one oxide selected from a group consisting of SiO<sub>2</sub>, B<sub>2</sub>O<sub>3</sub>, GeO<sub>2</sub>, P<sub>2</sub>O<sub>5</sub>, and ZrO<sub>2</sub>, and at least one oxide selected from a group consisting of alkali metal oxides, alkaline earth metal oxides, ZnO, Ga<sub>2</sub>O<sub>3</sub>, SnO<sub>2</sub>, In<sub>2</sub>O<sub>3</sub>, La<sub>2</sub>O<sub>3</sub>, Sc<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, and MnO<sub>2</sub>.
- 10. (New) The glass for laser processing according to claim 9, wherein the glass further contains at least one oxide selected from a group consisting of Sb<sub>2</sub>O<sub>3</sub> and Al<sub>2</sub>O<sub>3</sub>.
- 11. (New) The glass for laser processing according to claim 1, wherein the glass consists essentially of TiO<sub>2</sub>, at least one oxide selected from a group consisting of SiO<sub>2</sub>, B<sub>2</sub>O<sub>3</sub>, GeO<sub>2</sub>, P<sub>2</sub>O<sub>5</sub>, and ZrO<sub>2</sub>, and at least one oxide selected from a group consisting of alkali metal oxides and alkaline earth metal oxides.
- 12. (New) The glass for laser processing according to claim 11, wherein the glass further contains at least one oxide selected from a group consisting of Sb<sub>2</sub>O<sub>3</sub> and Al<sub>2</sub>O<sub>3</sub>.

- 13. (New) The glass for laser processing according to claim 8, wherein the glass consists essentially of 40 to 60 mol% of SiO<sub>2</sub>, 10 to 20 mol% of Al<sub>2</sub>O<sub>3</sub>, 10 to 20 mol% of TiO<sub>2</sub>, 10 to 35 mol% of MgO, 0 to 5 mol% of alkali metal oxides, and 0 to 10 mol% of alkaline earth metal oxides other than MgO.
- 14. (New) The glass for laser processing according to claim 13, wherein the glass further contains at least one oxide selected form a group consisting of Sb<sub>2</sub>O<sub>3</sub> and CeO<sub>2</sub>.